

REMARKS

Claims 1-51, all the claims pending in the application, have been rejected. No amendments are made to the claims because (1) the claims clearly define over Applicants' own prior art and were drafted as such, and (2) the Examiner has not considered each and every point of distinction presented by the Applicants that clearly demonstrate the differences from the prior art. Favorable reconsideration is respectfully requested.

Withdrawal of Finality of Office Action

In the present Office Action, the Examiner, for the first time during prosecution of the application, rejects claims 4, 8, 20, 26-29 and 39-43. In the Summary of the Office Action dated May 28, 2009, the Examiner lists these claims only as being "objected to." They are expressly excluded from a listing of rejected claims. In the absence of a rejection of these claims in the Office Action dated May 28, 2008, Applicants had assumed that these claims were allowable.

As provided by the U.S. Patent Law and as reflected in the MPEP, Applicants are entitled to an opportunity to respond to a rejection of the claims. No such opportunity has been presented with respect to claims 4, 8, 20, 26-29 and 39-43, since (1) they have been first rejected in the outstanding Office Action dated May 28, 2009 and (2) the Examiner has made the Office Action final, thereby precluding any opportunity to voluntarily amend the claims. Moreover, Applicants are denied an opportunity to conduct an interview with the Examiner with regard to the rejection of these claims.

As provided in MPEP, Applicants are entitled to having the finality of the outstanding Office Action withdrawn. Should the Examiner fail to allow the present application following consideration of the arguments for patentability below, and issue a new Office Action, the Examiner is respectfully requested to make such new Office Action NON-FINAL.

Specification

The Examiner has pointed to USPTO guidelines for a preferred layout for the specification of a utility application. Applicants have added titles to the sections of the specification, in accordance with those guidelines.

Claim Rejections - 35 USC § 102

Claims 1-10, 12-19, 21-22, 32-38, 44-51 are rejected under 35 U.S.C. 102(b) as being anticipated by Sirringhaus et al. (WO 01/46987). This rejection is traversed for at least the following reasons.

First, Applicants note that the Office Action repeats identically the text for the rejection of claims 1, 3, 7, 9, 14-17, 21, 22, 32-38 and 44-51. No new analysis has been presented.

Second, Applicants note that the Office Action presents new text for new rejections of claims 4, 5, 6, 8, 12, 13, 18, 19 and 26-29. As already noted, these are rejections for the first time during the present prosecution.

Third, Applicants note that the Office Action does not respond to Applicants demonstration that the Examiner has not made a *prima facie* case for anticipation or obviousness.

No Hydrophilic/hydrophobic Patterned Substrate

Specifically, at the “Response to Arguments” section at page 7 of the Office Action, the Examiner has stated: “The applicant argues that Sirringhaus does not teach using surface energy to localise material. However, Sirringhaus does not use surface treatments to make the surface either hydrophobic or hydrophilic, and that reads on surface energy”.

Applicants respectfully submit that the Examiner has failed to address the previous argument that Sirringhaus does not disclose using the ***hydrophilic/hydrophobic patterned substrate surface*** to control the deposition of the semiconductor layer 4. It would appear that again there has been a failure to understand that the ***hydrophobic/hydrophilic substrate pattern*** is used in Sirringhaus to control the deposition of the source and drain electrodes (2, 3). It is ***NOT*** used to control the deposition of the semiconductor layer 4.

Claim 1

For independent claim 1, the Examiner has again made specific reference to Figure 7 of Sirringhaus, but the Office Action does not indicate why Figure 7 shows localizing the semiconductor layer 4 material to a selected region of the substrate as an active island.

Because it is unclear from the Office Action comments for claim 1 why claim 1 continues to be rejected on the basis of Sirringhaus, Applicants also have looked at the Examiner’s comments for those dependent claims that relate to the localized deposition of the semiconductor material.

Dependent Claims

For each of claims 3, 4, 8, 9, 13, 39 and 40, the Examiner has made specific reference to one or more of page 22, last paragraph, page 24, 3rd paragraph, and page 27 of Sirringhaus.

No Disclosure of Rubbing

In relation to page 24, 3rd paragraph of Sirringhaus, Applicants note that there is no explicit indication at the cited section that such rubbing is done for the purpose of increasing the relative attraction of semiconductor material to that part of the substrate. To the extent that the Examiner asserts that the reference to “aligning” at the cited section as meaning aligning the semiconductor material with the channel between the source and drain electrodes, Applicants would respectfully submit that this section relates to effecting desirable alignment of the chains of the semiconductor polymer material.

Fig. 1(b) Does NOT Disclose Aligning

Applicants submit that the reference to “monodomain alignment of a liquid-crystalline polymer” at the last line of the cited paragraph, and also the illustration in Figure 1(b) is not consistent with what appears to be the Examiner’s interpretation of this section. Specifically, Figure 1(b) does not show aligning the semiconductor layer 4 with the channel between the source and drain electrodes 2, 3, but instead shows the semiconductor layer 4 as covering the whole of the area of the shown substrate 1.

No Reference to Semiconductor Layer

In relation to the last paragraph of page 22 of Sirringhaus, Applicants note that there is no mention of semiconductor layer 4 material here, and particularly no mention of using the patterned polyimide layer 10 to control the deposition of the semiconductor layer 4.

No Reference to Semiconductor Layer Attraction

In relation to claim 4 against which this section is cited, Applicants further note that Applicants could not even find any explicit indication that the glass surface 1 (on which the source and drain electrodes are formed) has a stronger attraction for the semiconductor layer 4 material than the polyimide layer surface 10. Applicants respectfully submit that the Examiner may have misunderstood the reference to PEDOT material at the cited paragraph as a reference to the semiconductor material.

In relation to page 27 of Sirringhaus, Applicants again could not find any mention of the semiconductor layer 4. Applicants respectfully submit that this cited section relates to patterning the surface of the gate dielectric layer (5 in Figure 7) to control the deposition of the gate electrode 6.

Claims 2-10, 12-19, 21-22, 32-38, 44-51

These claims would be patentable at least because of their dependence from patentable claim 1, for the reasons given above.

Claim Rejections - 35 USC § 103

Claims 11, 20, 23-25, 30, 31 and 39-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sirringhaus et al. This rejection is traversed for at least the following reasons.

These claims would be patentable at least because of their dependence from patentable claim 1, for the reasons given above.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

/Alan J. Kasper/

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

Alan J. Kasper
Registration No. 25,426

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: July 31, 2009